AUTODOC CLUB

# How to change rear suspension lower control arm on **BMW 3 Coupe (E46)** – replacement guide

## SIMILAR VIDEO TUTORIAL

This video shows the replacement procedure of a similar car part on another vehicle

**Important!**

This replacement procedure can be used for:
BMW 3 Coupe (E46) 323Ci 2.5, BMW 3 Coupe (E46) 328Ci 2.8, BMW 3 Coupe (E46) 320Ci 2.0, BMW 3 Coupe (E46) 318Ci 1.9, BMW 3 Coupe (E46) M3, BMW 3 Coupe (E46) 330xi 3.0, BMW 3 Coupe (E46) 320Ci 2.2, BMW 3 Coupe (E46) 325Ci 2.5, BMW 3 Coupe (E46) 316Ci 1.6, BMW 3 Coupe (E46) 318Ci 2.0, BMW 3 Coupe (E46) 330Cd 3.0, BMW 3 Coupe (E46) 320Cd 2.0, BMW 3 Coupe (E46) 330Ci 3.0

The steps may slightly vary depending on the car design.

This tutorial was created based on the replacement procedure for a similar car part on: BMW X3 (E83) 2.5 i

# REPLACEMENT: REAR SUSPENSION LOWER CONTROL ARM – BMW 3 COUPE (E46). TOOLS YOU NEED:

- Wire brush
- WD-40 spray
- Brake cleaner
- Copper grease
- Torque wrench
- Combination spanner #18
- Drive socket # 18
- Wheel impact socket #17
- Ratchet wrench
- Pin punch
- Hammer
- Crow bar
- Hydraulic transmission jack
- Wheel chock

Buy tools

Replacement: rear suspension lower control arm – BMW 3 Coupe (E46). AUTODOC experts recommend:

- The replacement procedure is identical for the left and right lower control arms.
- All work should be done with the engine stopped.

# REPLACEMENT: REAR SUSPENSION LOWER CONTROL ARM – BMW 3 COUPE (E46). USE THE FOLLOWING PROCEDURE:

1 Secure the wheels with chocks.

2 Loosen the wheel mounting bolts. Use wheel impact socket #17.

3 Raise the rear of the car and secure on supports.

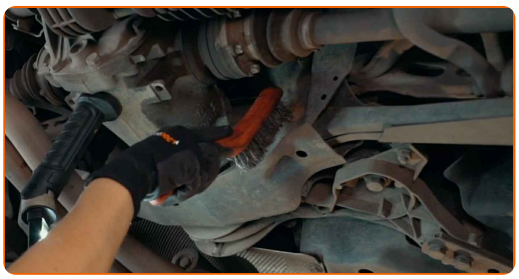
4 Unscrew the wheel bolts.

AUTODOC recommends:

- Warning! To avoid injury, hold the wheel while unscrewing the fastening bolts.
BMW 3 Coupe (E46)

**5** Remove the wheel.

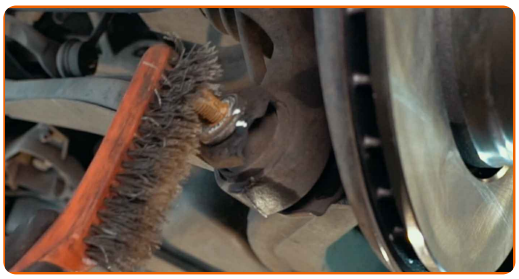
**6** Clean all joints of the arm. Use a wire brush. Use WD-40 spray.



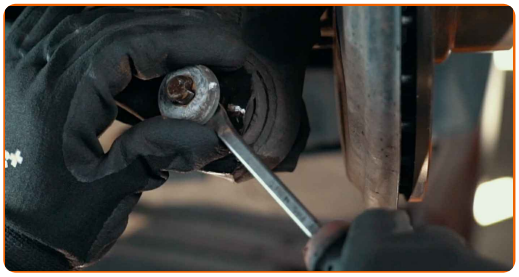
**7** Make a mark on the camber adjustment bolt.

**8** Unscrew the fastener connecting the control arm to the rear knuckle. Use a combination spanner #18. Use a drive socket #18. Use a ratchet wrench.

**9** Clean all joints of the arm. Use a wire brush.

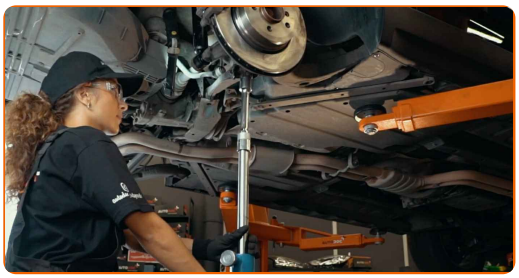


**10** Remove the fastening bolt. Use a drive socket #18. Use a crowbar.



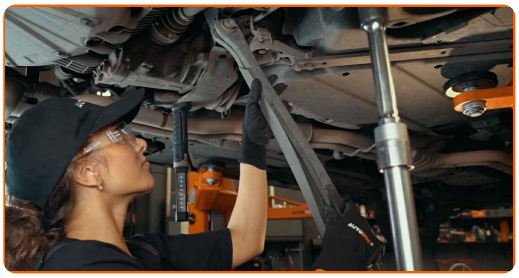
**11** Unscrew the fastener connecting the control arm to the subframe. Use a drive socket #18. Use a crowbar.

**12** Support the rear knuckle. Use a hydraulic transmission jack.



**13** Remove the fastening bolts. Use a pin punch. Use a hammer. Use a crowbar. Use a combination spanner #18.

**14** Remove the arm.



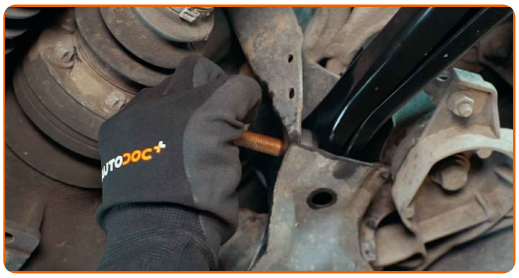
**15** Clean the mounting seats and the thread of the suspension arm. Use a wire brush. Use WD-40 spray.

**16** Install a new arm.

## AUTODOC recommends:

- Replacement: rear suspension lower control arm – BMW 3 Coupe (E46). Use only new bolts and nuts for installation.
- Do not damage the ball joint cover.

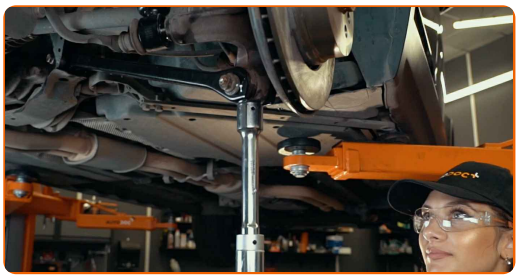
**17** Install the control arm fasteners. Use a combination spanner #18. Use a crowbar.



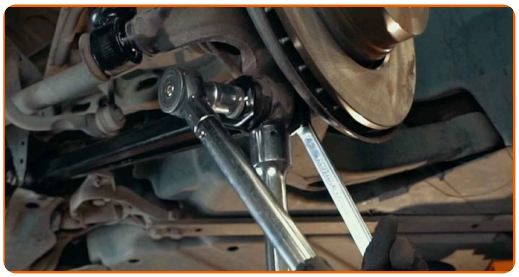
**18** Adjust the position of the alignment bolt according to the mark.

**19** Screw in the fasteners connecting the control arm to the rear knuckle. Use a combination spanner #18. Use a drive socket #18. Use a ratchet wrench.

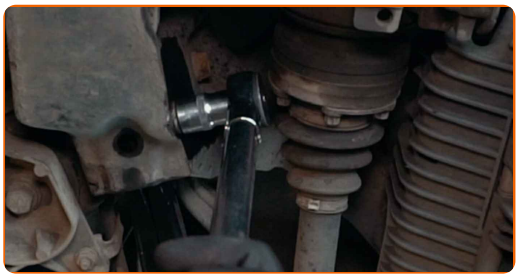
**20** Raise the hydraulic transmission jack by 10-15 cm.



**21** Tighten the fastener connecting the control arm to the rear knuckle. Use a combination spanner #18. Use a drive socket #18. Use a torque wrench. Tighten it to 100 Nm torque.



**22** Tighten the fastener connecting the control arm to the subframe. Use a drive socket #18. Use a torque wrench. Tighten it to 77 Nm torque.

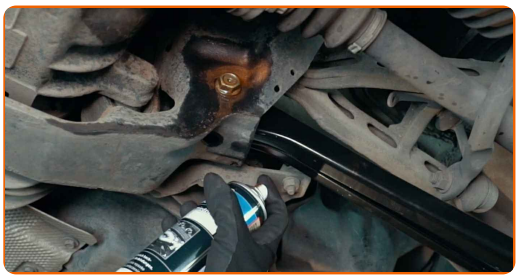


**23** Remove the support from under the rear knuckle.

## AUTODOC recommends:

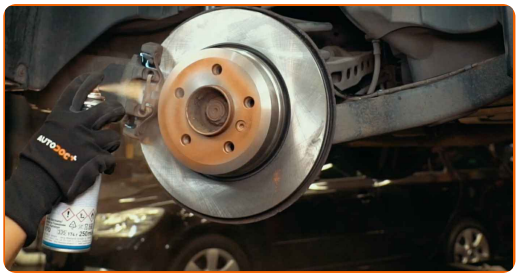
- Replacement: rear suspension lower control arm – BMW 3 Coupe (E46). Lower the transmission jack smoothly, without jerks, to avoid damaging components and mechanisms.

**24** Treat all joints of the arm. Use copper grease.



**25** Clean the wheel rim mounting seat. Use a wire brush.

**26** Treat the surface where the brake disc contacts the wheel rim. Use copper grease.

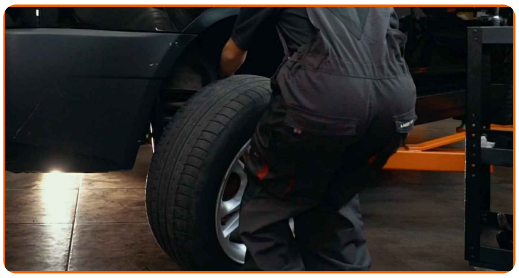


**27** Clean the brake disk surface. Use a brake cleaner.

## AUTODOC recommends:

- Replacement: rear suspension lower control arm – BMW 3 Coupe (E46). After applying the spray, wait a few minutes.

**28** Install the wheel.



## AUTODOC recommends:

- Important! Hold the wheel while screwing in the fastening bolts. BMW 3 Coupe (E46)

**29** Screw in the wheel bolts. Use wheel impact socket #17.

**30** Lower the car and working in a cross order, tighten the wheel bolts. Use wheel impact socket #17. Use a torque wrench. Tighten it to 140 Nm torque.

31 Remove the jacks and chocks.

## WELL DONE!

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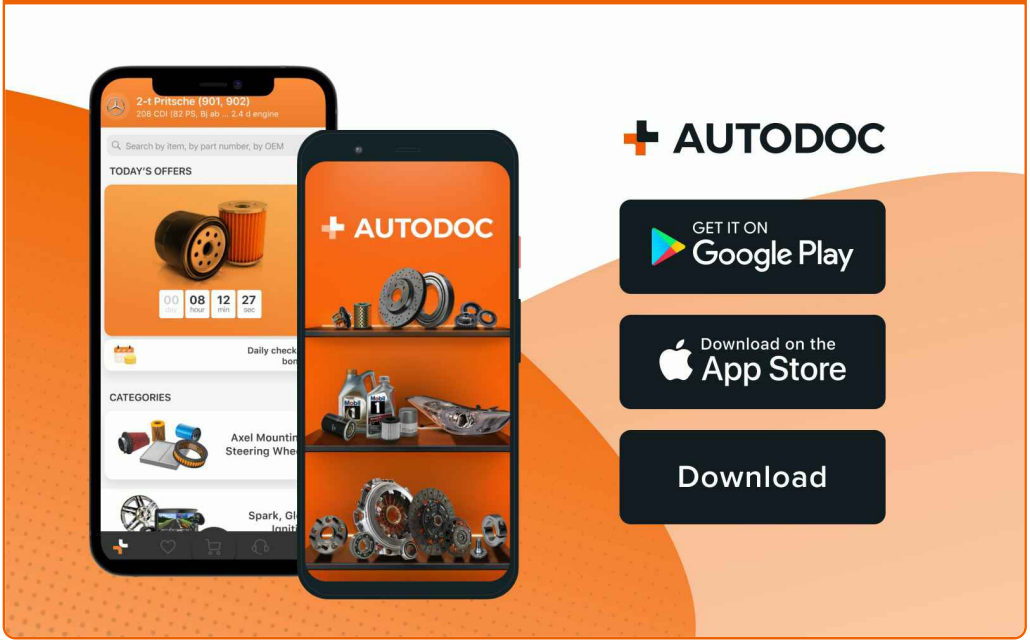


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